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## Amendments to the Claims

- 1. (Currently Amended) An isolated nucleic acid molecule encoding a branching enzyme from a bacterium of the genus Neisseria selected from the group consisting of
  - (a) <u>a</u> nucleic acid molecules encoding a protein which comprises the amino acid sequence depicted in SEQ ID NO. 2;
  - (b) <u>a nucleic acid molecules comprising the coding region depicted in SEQ ID NO. 1;</u>
  - (c) <u>a nucleic acid molecules encoding a protein which comprises the amino acid sequence encoded by the insert in plasmid DSM 12425;</u>
  - (d) <u>a</u> nucleic acid molecules comprising the coding region for a branching enzyme, which is contained in the insert of the plasmid DSM 12425;
  - (e) <u>a nucleic acid molecules encoding a protein the sequence of which has, in the first 100 amino acids, a homology of at least 6595</u>% to the amino acid sequence depicted in SEQ ID NO. 2; <u>and</u>
  - (f) <u>a</u> nucleic acid molecules the complementary strand of which hybridizes to a nucleic acid molecule of (a), (b), (c), (d) and/or (e) and which encode a branching enzyme from a bacterium of the genus Neisseriahaving more than 90% identity with SEQ ID NO:1; and
  - (g) nucleic acid molecules the sequence of which deviates from the sequence of a nucleic acid molecule of (f) due to the degeneracy of the genetic code.
- 2. (Original) A vector containing a nucleic acid molecule according to claim 1.
- 3. **(Original)** The vector according to claim 2, wherein the nucleic acid molecule is linked in sense-orientation to regulatory sequences guaranteeing the transcription in prokaryotic or eukaryotic cells.

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4. **(Original)** A host cell which is genetically modified with a nucleic acid molecule according to claim 1 or with a vector according to claim 2 or 3.

- 5. (Original) A method for producing a branching enzyme from a bacterium of the genus Neisseria, wherein a host cell according to claim 4 is cultivated under conditions allowing the expression of the protein, and wherein the protein is isolated from the cultivated cells and/or the culture medium.
- 6. **(Withdrawn)** A method for producing a branching enzyme from a bacterium of the genus Neisseria, wherein the protein is produced in an in-vitro transcription and translation system using a nucleic acid molecule according to claim 1.
- 7. **(Withdrawn)** A protein encoded by a nucleic acid molecule according to claim 1 or obtainable by a method according to claim 5.
- 8. **(Withdrawn)** An antibody which specifically recognises a protein according to claim 7.
- 9. (Withdrawn) Use of a protein according to claim 7 for producing  $\alpha$ -1,6-branched  $\alpha$ -1,4-glucans in in-vitro systems.
- 10. **(Original)** A transgenic plant cell containing a nucleic acid molecule according to claim 1, wherein the nucleic acid molecule is linked to regulatory sequences guaranteeing the transcription in plant cells.
- 11. **(Original)** The transgenic plant cell according to claim 10, wherein the nucleic acid molecule is linked to a sequence encoding a signal sequence which guarantees the localisation of the encoded protein in the plastids of the cells.
- 12. (Original) A transgenic plant containing plant cells according to claim 10.

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13. (Original) A method for producing a transgenic plant, wherein

(a) a plant cell is genetically modified by introducing a nucleic acid molecule according to claim 1 or a vector according to claim 2 or 3;

- (b) a plant is regenerated from the cell produced according to step (a); and
- (c) optionally further plants are produced from the plant produced according to step (b).
- 14. **(Original)** Harvestable parts of plants according to claim 1, wherein said parts of plants contain transgenic plant cells.
- 15. (Withdrawn) Starch obtainable from transgenic plant cells according to claim 1 or from parts of plants containing said transgenic plant cells.
- 16. (Withdrawn) The starch according to claim 15, wherein the composition of the starch is modified in such a way that it has an increased gel texture and/or a reduced phosphate content and/or a reduced peak viscosity and/or a reduced pastification temperature and/or a reduced size of the starch granules and/or a modified distribution of the side-chains in comparison with the starch from corresponding wild type plants.
- 17. (NEW) The nucleic acid molecule according to claim 1 having more than 95% identity with SEQ ID NO:1.